WHAT IS CLAIMED IS:

1. A confocal-chromatic wafer-inspection system comprising:

(a) a table, to put on a wafer for inspection, said table has two vertical degrees of freedom, enables XY axis movements;

(b) a movement-means for move said table along said vertical degrees of freedom;

(c) a confocal-chromatic height measurement system, perpendicular to said table, for measuring the range to a point on a surface of said wafer, enables to recognize changes in surface altitude while said wafer moves with said table; and

(d) a computer operative for:

(i) holding a bumps map of said wafer;

(ii) controlling said movement means;

(iii) moving said table so that the measuring point of said confocal-chromatic height measurement system crosses each bump of said wafer;

(iv) storing height profile of each bump;

(v) comparing said height profiles or checking each height profile according to predetermined criteria or both; and

(vi) enables results output.

2. The confocal-chromatic wafer-inspection system of claim 1, further includes:

(e) a microscope, integrated with said confocal-chromatic height measurement system, to observe said wafer surface; and

(f) a first camera for photographs said observed surface.

3. The confocal-chromatic wafer-inspection system of claim 2, further includes a vertical movement means for elevate and lower said microscope and said confocal-chromatic height measurement system.

4. The confocal-chromatic wafer-inspection system of claim 1, further includes a second camera for scanning said wafer, image or images of said scanning are used by said computer to recognize bumps, said computer stores location of said recognized bumps and built a bumps map to be held by said computer.

5. The confocal-chromatic wafer-inspection system of claim 4, wherein said second camera is a digital camera.

6. The confocal-chromatic wafer-inspection system of claim 4, wherein said second camera is a line-scan or array camera.

7. The confocal-chromatic wafer-inspection system of claim 4, wherein said vertical movement means enables elevate and lower said second camera.

8. The confocal-chromatic wafer-inspection system of claim 1, wherein said system is used for the measurement of:

- probe marks depth and profile;
- ink dot height and profile;
- height and profile of conductors of said wafer surface; and
- wafer thickness at different stages of the production and finished of said wafer.

9. A method for confocal-chromatic wafer-inspection comprising:

(a) obtaining a digital image of a wafer, using one of the following techniques :

(i) photographing whole said wafer; or

(ii) scanning sectors or lines of said wafer and composing a wafer image;

(b) mapping bumps location of said wafer, by recognizing bumps in said wafer image according to predetermined criteria;

(c) planning a bumps-track, wherein said bumps-track crosses said bumps of said wafer, at least one cross each bump;

(d) using a confocal-chromatic height measurement system, located perpendicular to said wafer, to measure altitude changes along said bumps-track;

(e) obtaining height profile of each bump, from said altitude changes along said bumps-track; and

(f) comparing bumps height or checking bumps height profile or both.